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AF Chief Scientist honors top scientist and engineers *by Jill Bohn, AFRL Public Affairs*

WRIGHT-PATTERSON AFB, Ohio — Twelve Air Force Research Laboratory scientists and engineers from seven technology directorates claimed coveted chief scientist awards this year. The Air Force Chief Scientist gives awards annually to recognize individuals for accomplishments in science and technology in four major categories.

Senior Scientist Jane Lehr, AFRL's Directed Energy Directorate, received the 2001 Basic Research Award. The award recognizes scientific efforts and achievements of U.S. Air Force in-house basic research activities and identifies people who make outstanding contributions.

Lehr, who works in the High-Power Microwave Division at Kirtland AFB, was selected for her contributions to the field of compact pulsed power and ultrafast switching and for the development of novel analytic techniques for tailoring waveforms.

Dean Kocian, Human Effectiveness Directorate, Wright-Patterson AFB, received the Harold Brown Award for the conception, development and transition of the Helmet-Mounted Sensory Technology Program while assigned to the Crew Systems Interface Division. His work included everything from the development and refinement of the basic concepts through the fabrication, testing, and operational utility evaluations of HMT/D systems.

Named for the former Secretary of the Air Force, the Harold Brown Award recognizes individual achievement in Research and Development leading to improvement in Air Force operations.

The Air Force Research and Development award was given to four individuals and one team. The award recognizes accomplishments of personnel working in the area of Exploratory Technology Development or Advanced Technology Development:

Capt. James Lake, Propulsion Directorate, Edwards AFB, co-invented a solid rocket motor that provides future Air Force spacecraft with enhanced maneuverability and reliability.

Capt. Derek Lincoln, Materials and Manufacturing Directorate, Wright-Patterson AFB, developed polymeric nanocomposite as motor case and insulation materials for advanced solid rocket motor case systems.

Capt. Eduardo Meidunas, Space Vehicles Directorate, Hanscom AFB, developed advanced algorithms for the analysis of hyperspectral and computational tools.

Capt. James R. Reid, Sensors Directorate, Hanscom AFB, performed research which led to the Micro Electromechanical Systems.

Maj. Michael McGlockton and Capt. Craig Watry, Munitions Directorate, Eglin AFB of the Agent Defeat Weapon Analysis Team, developed a set of unique engineering models to assess the functionality and survivability of complex, thread-mounted warheads payloads under highly dynamic impact and penetration conditions.

The Air Force Science and Engineering Award recognizes personnel for outstanding contributions in areas of research, development and engineering. S & E awards were presented in the following categories:

In Research Management, Maj. Joseph McNamee, Propulsion Directorate, Wright-Patterson AFB was selected for his positive impact on the Power Division. He has raised awareness on aerospace power systems research and development at all levels within DoD.

In Exploratory or Advanced Technology Development, R. Scott Erwin, Space Vehicles Directorate, was honored for his contribution on programs leading to important technology transfer activities. Team winner, Narrow Band Source Team, Directed Energy Directorate, Kirtland AFB contributed to the field of high power microwave and antenna system development.

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In Engineering Achievement, Russell L. Spyker, Propulsion Directorate, Wright-Patterson AFB, and team winner, Raven Small Telescope Team, Directed Energy Directorate, Maui, Hawaii, completed a wide range of engineering efforts to improve the affordability of capacitors. The Raven team successfully mated a billion-watt class, high-power microwave with a compact pulsed power system that lead to better understanding of physics and engineering issues of these compact systems.

In Manufacturing Technology, Nelson H. Forster, Propulsion Directorate, Wright-Patterson AFB, developed a process for high-strength/high temperature bearing cages that are affordable and robust. @

